

I Claim:

1. An exhaust nozzle for a gas turbine engine capable of vectoring a flow of exhaust gases issuing therefrom at an angle to a centre line of the engine, the exhaust nozzle comprising a plurality of radially outer and radially inner flaps circumferentially disposed around the engine, the radially outer and radially inner flaps overlapping each other alternately to define a flow path through which the exhaust gases flow, means for moving the radially outer flaps asymmetrically about the engine centre line being provided, the radially inner flaps being urged into sealing contact with the radially outer flaps by the exhaust gas flowing through the nozzle, the radially inner flaps being torsionally flexible so as to allow them to twist along their lengths so that sealing contact is maintained with the radially outer flaps when the radially outer flaps are moved asymmetrically.
2. ~~An exhaust nozzle as claimed in claim 1 in which each of the radially inner flaps is divided into a plurality of triangular sections so it is torsionally flexible along its length.~~
3. An exhaust nozzle as claimed in claim 2 in which the triangular sections of the radially inner flaps are interconnected by hinges.
4. ~~An exhaust nozzle as claimed in claim 1 in which the radially outer flaps are moved asymmetrically with respect to the engine centre line by linear actuators pivotally connected to the radially outer flaps.~~
5. An exhaust nozzle as claimed in claim 4 in which the radially outer flaps are moved asymmetrically with respect to the engine centre line by linear actuators which are connected to the flaps by an unison ring.
6. An exhaust nozzle as claimed in claim 1 in which each of the radially outer and radially inner flaps has a convergent and divergent section.
7. An exhaust nozzle as claimed in claim 6 in which the convergent and divergent sections of the radially outer and radially inner flaps are joined together by hinges.

Sub a1

functional

a
not shown

not shown

inconsistent w/ 4

a

not shown

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8. An exhaust nozzle as claimed in claim 1 in which the nozzle is provided with an outer fairing.

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